UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/558,438	03/19/2007	Koon-Seok Lee	7950.046.00-US	6134

30827   7590   02/01/2011

MCKENNA LONG & ALDRIDGE LLP
1900 K STREET, NW
WASHINGTON, DC 20006

EXAMINER
MITCHELL, DANIEL D

ART UNIT	PAPER NUMBER
2477	

MAIL DATE	DELIVERY MODE
02/01/2011	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)
Office Action Summary	10/558,438	LEE ET AL.
	Examiner	Art Unit	
	DANIEL MITCHELL	2477	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on <u>07 September 2010</u>.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) <u>33-36</u> is/are pending in the application.
   4a) Of the above claim(s) <u>1-32</u> is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) <u>33-36</u> is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on <u>19 November 2005</u> is/are: a)☒ accepted or b)☐ objected to by the Examiner.
    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
    a)☒ All b)☐ Some * c)☐ None of:
       1. ☒ Certified copies of the priority documents have been received.
       2. ☐ Certified copies of the priority documents have been received in Application No. _____.
       3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
   Paper No(s)/Mail Date <u>1/4/2011; 11/23/2010; 9/14/2010</u>.
4) ☐ Interview Summary (PTO-413)
   Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1.   A request for continued examination under 37 CFR 1.114, including the fee set

forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this

application is eligible for continued examination under 37 CFR 1.114, and the fee set

forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action

has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on

9/7/2010 has been entered.

Claim Objections

2.   Claim 35 objected to because of the following informalities: Claim 35 recites a

data link "payer" for examination purposes the Examiner interprets this to mean data

link "layer". Appropriate correction is required.

Claim Rejections - 35 USC § 103

3.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

4.   Claims 33-36rejected under 35 U.S.C. 103(a) as being unpatentable over Ueno

et al. (US Publication No. 2003/0037166 A1), hereinafter referred as Ueno in view of

Binding et al. (US Publication No. 2004/0184456 A1), hereinafter referred as Binding.

Regarding claim 33, Ueno teaches an interfacing device **[device 50]** for

communicating data between a dependent transmission medium and an independent

transmission medium, the interfacing device **(fig. 8 teaches a interfacing device 50)**

comprising:

a first interfacing module **[processing part 53]**, connected to the dependent

transmission medium, configured to receive a data through the dependent transmission

medium, determine whether or not the data is to be processed based on a home code

(network ID) included in the data **(par. 111 determines whether to process the data**

based on the network ID of the appliance ID) ,

wherein the first interfacing module **[processing part 53]** includes interpreting a

signal corresponding to the data received from the dependent transmission medium

according to a first communication protocol **(par. 111 teaches the interface 53**

receiving and interpreting the received signal), and processing a data unit including

at least a part of the data according to the interpreted signal **(par. 111 teaches**

generating the message with the extracted data for data transmission); and

a second interfacing module **[processing part 54]**, connected to the

independent transmission medium, configured to receive the data from the first

interfacing module when the data is determined to be processed **(par. 116 teaches the**

processing part 54 receives data from processing part 53 when the data that is

processed is determined to be destined for a different network), and transmit the

received data to the independent transmission medium **(par. 116 further teaches**

processing part 54 transmitting the data to the other network),

wherein the second interfacing module includes receiving the data unit from the first interfacing module **(par. 116, fig. 8 teaches data is received at the second interface 54 from the first interface 53)**, and transmitting a signal corresponding to the data unit to the independent transmission medium according to a second communication protocol different from the first communication protocol **(par. 116 teaches transmitting the data to the second network; par. 157 suggests a first protocol for a first network and first appliance is different from a second protocol for a second network and second appliance)**.

However Ueno does not expressly disclose the interface module includes a first physical layer for receiving data and a first data link layer to process the data; and a second interface module including a second physical layer for transmitting data and a second data link layer for processing the data.

Binding teaches an interfacing device as the primary reference. Binding further teaches in par. 31 the interfaces of the device includes a physical layer for providing the physical and electrical interfaces between the nodes and the network and further teaches a data link layer which process the data between the physical layer and the network layer.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Ueno to include the interfaces modules of the device to comprise the physical layer and link layer. One would be motivated as such in order to communicate the data through the respective layers of the protocol stack (par. 31).

Regarding claim 34, Ueno and Binding teach a device as the parent claim.

However Ueno does not expressly disclose wherein the first interfacing module further comprises a network layer configured to receive the data unit from the first data link layer and generate a protocol data unit (NPDU) including a NPDU header and a NPDU tailor, the NPDU comprising an address of the interface module, an destination address, and a kind of a packet.

Binding teaches wherein the first interfacing module further comprises a network layer configured to receive the data unit from the first data link layer and generate a protocol data unit (NPDU) including a NPDU header and a NPDU tailor, the NPDU comprising an address of the interface module, an destination address, and a kind of a packet **(par. 31, 32 a network layer generating a NPDU; par. 29 teaches the packets include headers and payloads; par. 6 teaches the header includes a source address (address interface module), destination address and par. 37 teaches a option field for designating a kind of packet)**.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Ueno to include generating the NPDU data unit. One would be motivated as such in order include the control information in the packet (par. 2).

Regarding claim 35, Ueno teaches a method for communicating data between a dependent transmission medium and an independent transmission medium, the method

being performed by at least one electric device including a first interfacing module and a

second interfacing module **(fig. 8 teaches a device with a first interface 53 and**

second interface 54), wherein the first interfacing module is connected to the

dependent transmission medium and the second interfacing module is connected to the

independent transmission medium **(fig. 8 teaches interface 53 connected to a**

transmission medium and interface 54 connected to a second transmission

medium), and the method comprising:

performing, by the first interfacing module **[interface 53]**, a receiving operation of

receiving a data through the dependent transmission medium **(par. 111 teaches the**

interface 53 receiving and interpreting the received signal),

wherein the receiving operation comprises interpreting a signal corresponding to

the data received from the dependent transmission medium according to a first

communication protocol **(par. 111 teaches the interface 53 receiving and**

interpreting the received signal), and

generating, via a the first interfacing module, a data unit including at least a part

of the data according to the interpreted signal **(par. 111 teaches generating the**

message with the extracted data for data transmission);

determining, by the first interfacing module, whether or not the data is to be

processed based on a home code included in the data **(par. 111 determines whether**

to process the data based on the network ID of the appliance ID);

transmitting, via the first interfacing module, the data to the second interfacing

module when the data is determined to be processed **(par. 116 teaches the**

processing part 54 receives data from processing part 53 when the data that is processed is determined to be destined for a different network); and

performing, via the second interfacing module, a transmitting operation of transmitting the data to the independent transmission medium **(par. 116 teaches transmitting the data to the second network; par. 157 suggests a first protocol for a first network and first appliance is different from a second protocol for a second network and second appliance)**,

wherein the transmitting operation comprises receiving the data unit from the first interfacing module **(par. 116, fig. 8 teaches data is received at the second interface 54 from the first interface 53)**, and transmitting a signal corresponding to the data unit to the independent transmission medium according to a second communication protocol different from the first communication protocol **(par. 116 teaches transmitting the data to the second network; par. 157 suggests a first protocol for a first network and first appliance is different from a second protocol for a second network and second appliance)**.

However Ueno does not expressly disclose the interface module includes a first physical layer for receiving data and a first data link layer to process the data; and a second interface module including a second physical layer for transmitting data and a second data link layer for processing the data.

Binding teaches an interfacing device as the primary reference. Binding further teaches in par. 31 the interfaces of the device includes a physical for providing the physical and electrical interfaces between the nodes and the network and further

teaches a data link layer which process the data between the physical layer and the

network layer.

Therefore, it would have been obvious to one of ordinary skill in the art at the

time of the invention to modify the teachings of Ueno to include the interfaces modules

of the device to comprise the physical layer and link layer. One would be motivated as

such in order to communicate the data through the respective layers of the protocol

stack (par. 31).

Regarding claim 36, Ueno and Binding teach a method as the parent claim. Ueno

further teaches the first interface transmitting data to the second interface **(fig. 8, par.**

116 teaches the processing part 54 receives data from processing part 53 when

the data that is processed is determined to be destined for a different network).

However Ueno does not expressly disclose wherein the data is transmitted from

the first interfacing module to the second interfacing module through a network layer

configured to receive the data unit from the first data link layer and generate a protocol

data unit (NPDU) including a NPDU header and a NPDU tailor, the NPDU comprising

an address of the interface module, an destination address, and a kind of a packet.

Binding teaches wherein the data is transmitted from the first interfacing module

to the second interfacing module through a network layer configured to receive the data

unit from the first data link layer and generate a protocol data unit (NPDU) including a

NPDU header and a NPDU tailor, the NPDU comprising an address of the interface

module, an destination address, and a kind of a packet **(par. 31, 32 a network layer**

generating a NPDU; par. 29 teaches the packets include headers and payloads;

par. 6 teaches the header includes a source address (address interface module),

destination address and par. 37 teaches a option field for designating a kind of

packet).

Therefore, it would have been obvious to one of ordinary skill in the art at the

time of the invention to modify the teachings of Ueno to include generating the NPDU

data unit. One would be motivated as such in order include the control information in

the packet (par. 2).

Conclusion

5.   Any response to this action should be **faxed** to (571) 173-8300 or **mailed** to:

> Commissioner of Patents
> P.O. Box 1450
> Alexandria, VA 22313-1450
>
> **Hand delivered responses should be brought to:**
> Customer Service Window
> Randolph Building
> 401 Dulany Street
> Alexandria, VA 22314

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to DANIEL MITCHELL whose telephone number is

(571)270-5307. The examiner can normally be reached on Monday - Friday 8:00 am -

5:00 pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Chirag G. Shah can be reached on 571-272-3144. The fax phone number

for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/D. M./
Examiner, Art Unit 2477

/Gregory B Sefcheck/
Primary Examiner, Art Unit 2477
1-28-2011